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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,787	03/08/2004	.Yoshio Dejima	0828.70005	4078

7590 01/08/2007  
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EXAMINER

DUONG, KHANH B

ART UNIT PAPER NUMBER

2822

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/795,787

Applicant(s)

DEJIMA, YOSHIO

Examiner

Khanh B. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-10 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

This office action is in response to the amendment filed October 10, 2006.

Accordingly, claims 1-4, 6-8 and 10 were amended.

Currently, claims 1-10 remain pending.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3 are rejected, as understood, under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. (U.S. Patent No. 6,468,840).**

Re claims 1 and 2, Tanaka et al. ("Tanaka") discloses in Figs. 15(a), (b) and (d) a method for fabricating a stagger type thin film transistor substrate, said method comprising the process of forming a resist pattern 108 with different thicknesses in different areas by performing exposure once on a resist with a half tone mask [see col. 11, lines 30-45], the resist pattern thus formed by performing exposure once on the resist with the half tone mask masking (i) a drain bus-line area for forming a thin film transistor in the thin film transistor substrate and (ii) a thin film transistor formed area for forming a thin film transistor in the thin film transistor substrate, the thin film transistor formed area having a channel formed area for forming a channel of the thin film transistor, the resist in the channel formed area being thinner than the resist in the drain bus-line formed area [see illustration below of Figs. 15(b) and (d)].

Fig.15(b)

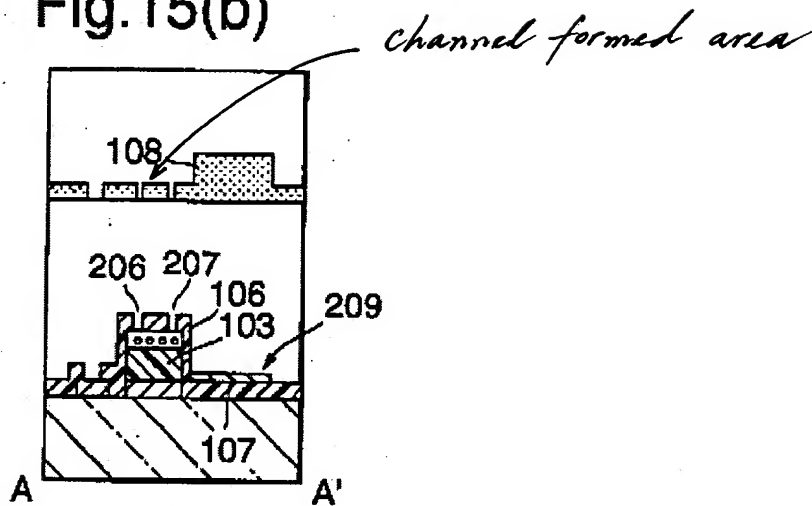
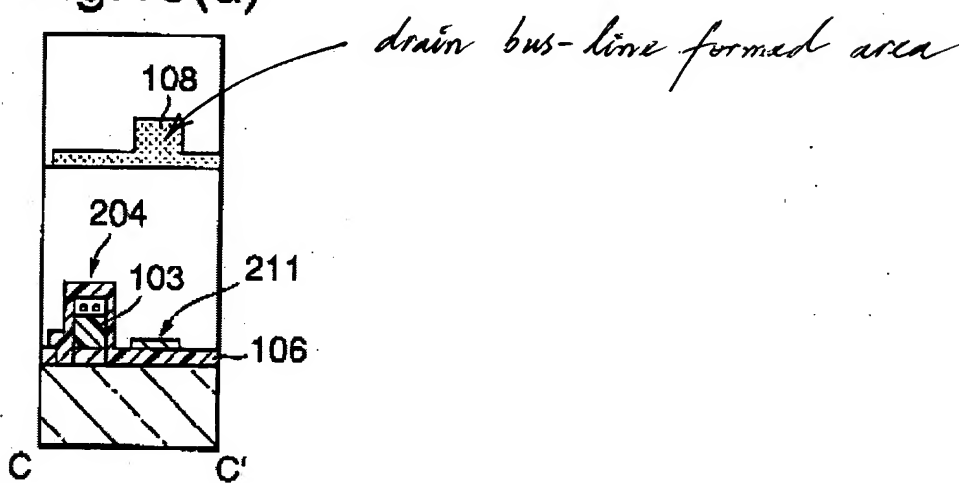


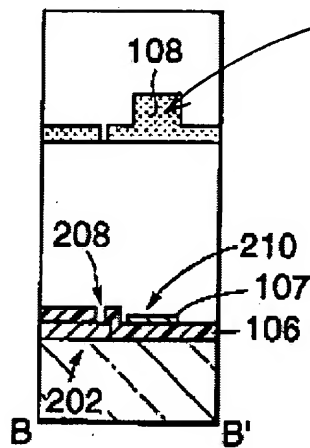
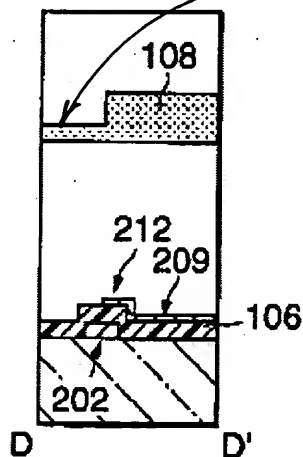
Fig.15(d)



Re claim 3, Tanaka expressly discloses in Figs. 15(a), (c) and (e) a method for fabricating a stagger type thin film transistor substrate, said method comprising the process of forming a resist pattern 108 with different thicknesses in different areas by performing exposure once on a resist with a half tone mask [see col. 11, lines 30-45], the mask thus formed by performing the exposure once on the resist with the half tone mask masking (i) a gate bus-line area for forming a gate bus-line in the thin film transistor substrate and (ii) a pixel electrode formed area for forming a pixel electrode in the thin film transistor substrate, the resist in the gate bus-line

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formed area being thicker than the resist in the pixel electrode formed area [see illustration below of Figs. 15(c) and (e)].

**Fig.15(c)****Fig.15(e)**

*Allowable Subject Matter*

Claims 4-10 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

none of the prior art of record, taken alone or in combination, fairly shows or suggests all the limitations as recited in the claims.

Re claim 4, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: ashing the resist pattern until removal of the thin resist formed in the channel area is completed; and channel-etching the operation layer with the resist pattern which remains after the ashing.

Re claim 7, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: ashing the resist pattern until removal of the thin resist formed in the pixel electrode formed area is completed; and etching the gate bus-line layer in the pixel electrode formed area with the resist pattern which remains after the ashing.

Re claim 10, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: ashing the resist pattern until removal of the thin resist formed in areas other than the pixel electrode formed area is completed; and etching the transparent conductive film layer with the resist pattern which remains after the ashing.

### ***Response to Arguments***

Applicant's arguments with respect to the amended claims 1-3 have been addressed in the rejections above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KBD

  
M. Wilczewski  
Primary Examiner  
TC 2800